International Modelling and Simulation

Mick Ryan Co-chair and Founder ISAG
Presentation to M&S Industry Steering Group
Sheraton Tyson's Corner, Washington DC
Thursday 3 June 1999

UK Synthetic Environment Management Board

The Synthetic Environment Management Board is a joint Government and Industry group which provides a focus for SE activity in the UK and develops and implements combined Government & Industry strategy and policy.



Constitution

- Representation :
 - British Aerospace (Chair)
 - GEC
 - Vickers Defence Systems
 - GKN Westland
 - Thomson Training & Simulation Limited
 - British Telecom

- MoD Centre SyntheticEnvironment Co-ordination Office
- MoD DPA Directorate
 of Procurement
 Management Policy
- DTI
- DERA
- DMA (Wider Industry)



Origins

 Group Formed in 1993 to Encourage Common Infrastructure Support to UK Programmes Such As:

Air Defence SE

Virtual Aircraft SE

Command & Control Information Systems SE



Purpose

- To pursue the definition development and exploitation of a National Capability In Synthetic Environment in order to maintain and enhance UK's influence in this field
- To be the National Advisory Council on Synthetic Environments



Terms Of Reference - 1

- To provide a forum for Industry and Government liaison on SE
- To define, develop and maintain a cohesive UK Strategy for SE
- To pursue the dissemination of that strategy within the UK industrial base and its customers
- To provide briefing events for relevant UK organisations

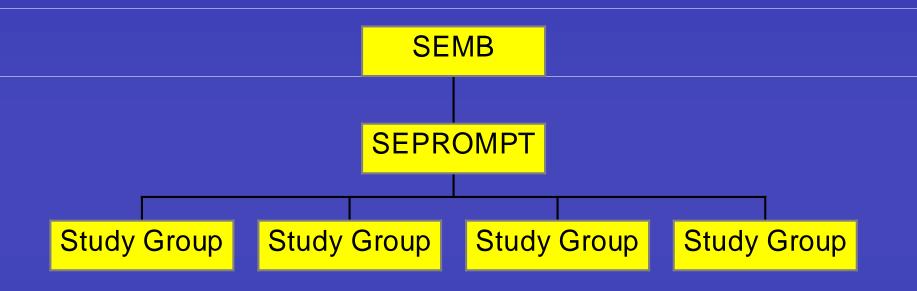


Terms Of Reference - 2

- To define recommend and co-ordinate R&D proposals and activities for UK SE
- To promote the adoption of SE compatible processes and tools within the UK
- To co-ordinate UK SE activities with Europe, US,
 NATO and the ROW
- To champion the adoption of best practice in the application of SE in the UK
- To review and evaluate the benefit of SE to UK

SEMB

Organisation





Study Group Activities

- Communications
- Commercial
- Research Database
- SE Taxonomy
- SE Application
- SE Strategy and Policy
- Research & TechnologyPrioritisation



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SEPROMT

Overview of Study Programme

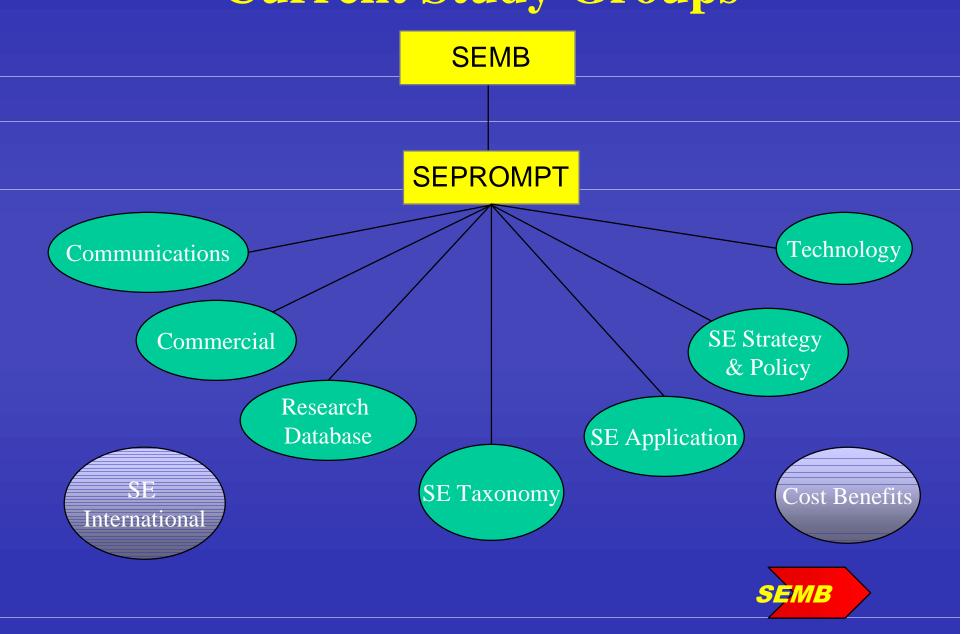


Purpose of the SEPROMT

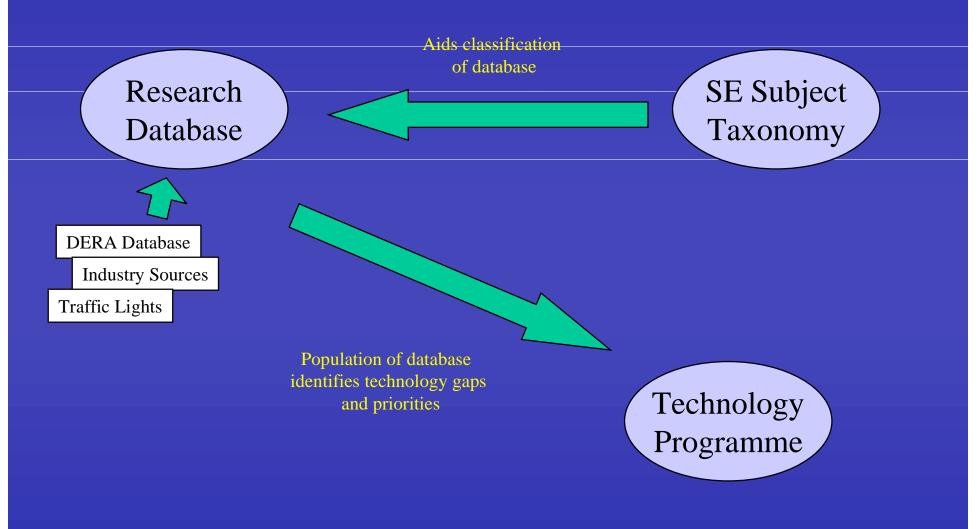
SEPROMT are directed by the SEMB to carry out the studies that are required to permit the development of UK SE strategy and Policy



Current Study Groups

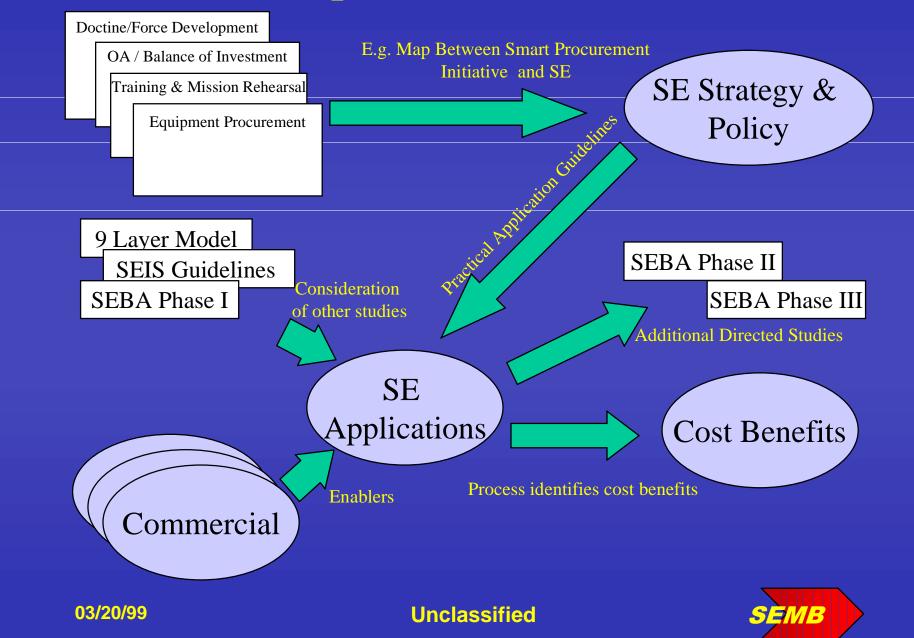


Relationship of SEPROMT Studies - 1





Relationship of SEPROMT Studies - 2



Communications

- Focussed at improving Internal & External visibility of the SEMB
 - Its Role & operations
- Overall Aims:
 - ensure effective communication of the benefits of SE to the whole range of customer organisations
 - both in the UK and abroad,
 - to ensure that all companies with an interest in SE are aware, and have a route to get involved in SEMB activities



SE Taxonomy

- The Study aims to:
 - establish a consistent framework for Synthetic
 Environment related topics, terms and data across the range of application domains.
 - Rationalise the use of terminology and abbreviations with existing definitions, frameworks and glossaries used within the Modelling & Simulation community.
 - complete Version 1 of the SE Taxonomy by November 1999.



Research Database

- The aim of this study is
 - to identify, collate and describe research and other activities that are being carried out throughout the UK, which are aimed at developing the technologies utilised within SE.
 - The activities identified will be placed within a database to allow analysis of the overall developments taking place in SE,
 - to help identify those areas which require new or additional focus



Technology

- The aim of the technology group is to study the maturity of all the technologies required for SE in order to:
 - develop and communicate a shared understanding of industry, funding agency and other stakeholders needs and priorities for research and technology development
 - maintain an overview of UK competitiveness in the field of SE technology
 - advise key stakeholders (Industry, MoD and the Defence and Aerospace Foresight Panel) of key themes and directions for the national effort in research and technology development, taking account of European and International initiatives.



SE Strategy & Policy

- The purpose of this study group is:
 - to develop and document joint Industry and MoD strategy and policy for the UK corporate exploitation of SEs for defence.
 - to build on and develop the existing separate Industry and MoD documents
 - to arrive at a strategy, backed up with procedures and route maps for achievement, for the future development of UK SE capability



SE Application

- The aim of this study is to examine the practical application of Synthetic Environments for each of the four UK MOD application domains:
- Operational Analysis / Balance of Investment
 - Training and Mission Rehearsal
 - Equipment procurement
 - e.g. Application of SE to support Smart Procurement Initiative (SPI)
 - Doctrine and Force Development



Commercial

- It is recognised that in order to maximise the benefits of using SE within the acquisition of systems, changes will need to be made to commercial, as well as technical practices & procedures.
- The commercial programme is focussed at resolving commercial issues associated with the wider application of SE within SPI, such as:
 - ownership & visibility of Intellectual Property within shared modelling environments,
 - application of competition policy
 - contracting mechanisms.



INTERNATIONAL SIMULATION ADVISORY GROUP

1. UK	14. Czech Republic	27. Romania
2. Germany	15. Denmark	28. Russia
3. France	16. Estonia	29. Singapore
4. The Netherlands	17. Finland	30. Slovenia
5. Sweden	18. Hungary	31. South Africa
6. Australia	19. India	32. Turkey
7. Austria	20. Israel	33. Ukraine
8. Belgium	21. Italy	34. USA
9. Brazil	22. Japan	35. European Space Agency (ESA)
10. Canada	23. Latvia	36. EuroControl
11. China	24. Malaysia	37. NATO
12. Chinese Taipei	25. Norway	38. SCS (International)
13. Croatia	26. Poland	

ISAG Progress

- Three Objectives over Last Three
 - **Years All Achieved:**
 - 1. Release of the RunTime Infrastructure on to Internet
 - 2. Forum at SISO Workshop to discuss IEEE1278 Transition Issues. Now a Non-HLA Forum
 - 3. Affiliation of ISAG to SISO

ISAG Progress

- Achieved Affiliation to SISO
 - First Meeting between ISAG & SISO EXCOM 16th March 1999
 - EXCOM wants more international members to stand for Committee Posts in SISO Mick now on SISO EXCOM
 - EXCOM wanted ISAG Recommendations for Conferences outside N America for SISO Recognition or Act as SISO Workshop Sites. ISAG's 1st recs:
 - ITEC (99 The Hague 13-16Apr99)
 - NATO PfP/PWP Workshop Brno 3-5May99
 - UK SE Conference RMCS Shrivenham October each year
 - SIMTECT2000 Australia

ISAG Progress

- Now 32 Members & 4 Organisations
- Thanks are Due to the Swedish
 Government for Funding Admin and
 Website for ISAG
- ISAG Website at URL:

www.isag.cx

ISAG at Spring99 SISO Workshop

• 97 International Delegates:

UK	35
UK	33

- France 17
- Sweden12
- Germany 10
- Canada7
- The Netherlands 6
- Israel
- Japan
- NATO
- Italy

Opportunities for ISAG Members

- ITEC each April
- Every 2 months SISO Web
 Newsletter International Section
- ISAG Website Pages
- International Briefing Session at Every SISO Workshop, Orlando

ISAG Concerns 1999

Open Potential Divergence of Standards -IEEE v OMG

 Potential Version Discrepancy Between Tools and RTI

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